Children's Vision
FOUNDATION

Written testimony for House Education Committee hearing March 27, 2013

Chair Gelser and members of the committee, my name is Julie Bibler. I am the Director of the Children's Vision Foundation (CVF), a non-profit organization whose mission is to identify children who have potential visual barriers to learning, to encourage families and schools to seek professional eye care for identified children, and to raise awareness about the importance of early detection of vision problems. This is our Board of Director's secretary, Debby Golonka, who has a Masters degree in Public Health and is a Medical Content Specialist for Healthwise, Inc.

We are speaking in support of House Bill 3000. This bill is an important step towards identifying the thousands of Oregon children with vision problems which are affecting their education and lives.

Oregon's children

I personally have been working on behalf of children for more than 30 years in various capacities including-

- School volunteer and children's advocate in schools and communities since 1980's.
- Administrator for a Department of Education pilot project in a public school in the 90's.
- Vision screening children, primarily elementary students, since the 90's.
- Meeting and working with state leaders about the need for an effective vision screening system since the 90's.

Currently, I coordinate annual and biennial school and community screenings involving thousands of students from every county in our state. And I collect data from every screening. Our screenings are performed primarily in elementary schools. CVF's seven step screening battery is accepted as an effective vision screening by eye care professionals nationally.

We come before you on behalf of children throughout our state. Approximately 1 out of 5 children has a vision problem, many of which are currently unidentified. The Snellen chart behind us was created during the Civil war to identify distance vision problems. Over 150 years old, this screening was developed for battle and not education. Screening programs that rely on it as the only tool are missing out on additional integral and life-affecting vision abilities of children. Current ergonomic research indicates that approximately 75% of the work done in the classroom is near work, which this chart doesn't detect. Our children need a more thorough screening than this.

CVF vision screenings and referral program

In the 2008 legislative session, the House Education committee asked CVF to share information regarding children's vision screening results. Representatives stated that this was the first specific data they'd ever received. CVF has presented specific results and information to house committees, task forces, and other state capital leaders many times since then.

Last school year (2011-2012) 23% of the students CVF screened were identified with potential vision problems. We have identified over 24% of our students so far this current school year. With 80% of a child's learning done visually, identifying these students and referring them to a professional eye doctor is crucial. We see students every day who can't see well up close. In addition, we see children who can't

see most of these letters on the Snellen chart or have potential problems with fusion, tracking, near point of convergence and more.

Our children need a systematic, cost effective, statewide vision screening process to help them succeed in school and to help enable them to be productive, contributing members of society. This bill is a step towards that process. It's important for children to have more than one vision screening during school, as the following story illustrates -

During a recent CVF screening, one of the children identified with a potential vision problem was a fourth grade girl. This girl explained that her right eye had been accidentally hit with a stick last fall. Since then, she has been having vision problems. She said her family was unable to afford a professional exam, so she was just dealing with it. I compiled CVF's standard three page vision screening referral packet, contacted the school office manager and shared her story, who then informed the school nurse. CVF will follow up with that student and all of the other 24% identified during the next school year as our normal process. Our point is that this 4th grader's problem needed to be identified.

Our three prong (family, teacher, and school) reporting and communication system is proving very successful for school districts and is critical. Schools and teachers are under major pressure and time constraints these days. They need an effective screening, communication and follow up system.

Family, teacher, and school support

When a student is identified with a potential vision problem, CVF provides the **family** with the screening results and our contact information, and encourages families to seek professional care. This information is provided in English or Spanish. CVF also provides a full report to the **school**, listing every student that was identified, absent, or missed for some reason.

Classroom **teachers** receive their students' results and a survey so that they can follow up with students' families, ask any questions, and share comments or ideas of how to improve CVF's screenings. Here are some of their comments-

"I totally appreciate this service. Over the years this screening has provided valuable information to me and parents. Sometimes it is the first step for children who have vision issues (that parents would not know otherwise)"

"Living in a rural district with our high unemployment rate makes this free screening a huge asset to our school district and our children."

"This has been a huge benefit for children from low income homes where parents have not taken their children in for routine eye exams. This program has identified students with eye issues (focusing/vision) and that has helped in the classroom."

"It is wonderful to know the students are taken care of. Vision problems can cause real problems for students."

"This screening has identified so many eye concerns related to reading issues- really critical services!"

Support remains strong in the communities we serve.

Impact of vision on learning and life success

I could literally share many stories of children and schools I've worked with but here's another important one-

Last spring CVF, along with trained school and community volunteers, screened 277 K-6th grade students in a rural Lane County school district. 82 students (30%) were identified with potential vision problems. 30 of their 46 kindergarteners were identified. This school district is one of the approximately 25% of

the 197 school districts without a nurse in Oregon. This elementary school has a 77% free and reduced student population.

One screening volunteer was the school's DIBELS coordinator. DIBELS (Dynamic Indicators of Basic Early Literacy Skills) measures early literacy skills in students and is used nationally. We compared the lists of students identified with vision problems and students not meeting DIBELS goals. We found 40 of those 82 students were on both lists! A month later, a leader from their school contacted me for more information. She had volunteered to follow up with the families of the students who were identified. We will be returning on our biennial rotation to this outlying community next school year, screening those and other students. We'll know the results fairly soon!

Identifying these students in primary grades is critical. I remember being shocked to hear that California bases the number of prison beds needed 15 years from now on the number of 3rd grade non readers! I mentioned this to an Oregon Department of Education leader years ago and he replied that there's a similar system in Oregon. A past chair of this committee agreed. The bottom line is our state is planning prison beds without knowing whether these students can see!

I'll never forget the 18 year old high school dropout that we identified at the Oregon Youth Challenge. He came up afterward and thanked me for checking his vision. "I've always wondered," he said. We have been screening all Oregon Youth Challenge students since 2002. A decade of their results is included in your packets. We've identified 521 of these 2,825 high school dropouts since then. Since 2006, Youth Challenge has become more stringent with new participants, asking them to have a professional vision exam within the last six months before entering the program. This system could be similar to what House Bill 3000 is asking for.

One other thing to consider is higher education. Every year COCC-OSU first year nursing students participate in CVF's annual presentation and screening. Many of this year's students had vision problems. Their professors are concerned, especially considering these students help at the nearby hospitals. They are considering including a vision screening or exam in their registration process for future classes.

Thank you for the opportunity to share information with you about a subject near and dear to all of us - our children. It has been a pleasure working with many of you over the years, especially Representatives Kotek and Whisnant, as well as senators. Know that 56 of the 57 representatives on the floor and all 30 senators voted yes for a pilot project in 2010, so this issue has major support. We appreciate your dedication to our state and our children.

We are leaving informational packets in case you need them. If you need further information, please call. The Children's Vision Foundation remains committed to making a difference in the lives of our children. Thousands of these Oregon children are in their classrooms having vision problems that need to be identified. We have the opportunity to improve their education and lives- let's do it!

Do you have any questions?

Resource: http://www.childrensvisionfoundation.org

The Bulletin

SUNDAY
August 31, 2008

Serving Central Oregon since 1903

Local program may be model for improvement

State's schools lack extensive vision testing

By Markian Hawryluk
The Bulletin

Oregon students head back to school this week toting their pencils, notebooks, rulers and glue, but many may still arrive ill-equipped for academic success.

Despite state regulations requiring school districts to conduct vision screenings, a recent survey suggests that few students receive more than a cursory check of their vision. And while state legislators have begun to investigate the issue, there is considerable disagreement about how best to identify and help kids with vision issues.

BACK TO SCHOOL

A survey of schooldistricts conducted by the nonprofit health policy group Oregon Health Forum found that only 23 percent performed screenings other than for distance acuity. Slightly more than half of school districts conducted only distance screenings, while the remainder could not say what sort of visual screening — if any — took place.

"This is important because distance-only screening is not a diagnostic exam and cannot identify the likelihood of many other optical disabilities," Carolyn Robinson, executive director of the forum, told state legislators at a February hearing. "If children are only receiving distance acuity testing, they are at risk for other common eye problems."

Oregon regulations specify that school districts must conduct vision screenings of students but provide no further details on how that must be done.

"That's the end of it," says Leslie Currin, the lead school nurse in Oregon. "It just says they have to do it. It doesn't say how often and in what grades."

The Oregon Department of Education's School Health Services Manual recommends schools screen children in preschool, kindergarten and grades 1, 2 or 3, and that screening should be conducted under the direction of a school nurse.

Currin says about 95 percent of school districts screen kids for vision at least once between kindergarten and 12th grade, but not all schools conduct screenings in primary grades. The problem, she says, comes down to money.

"Nobody is funding this," Currin says. "There's no money to do this, and it's rather expensive."

And because districts are also struggling to hire enough school nurses, there often is nobody available to coordinate vision screenings. School nurses directed the screenings in only 10 percent of school districts, according to the survey.

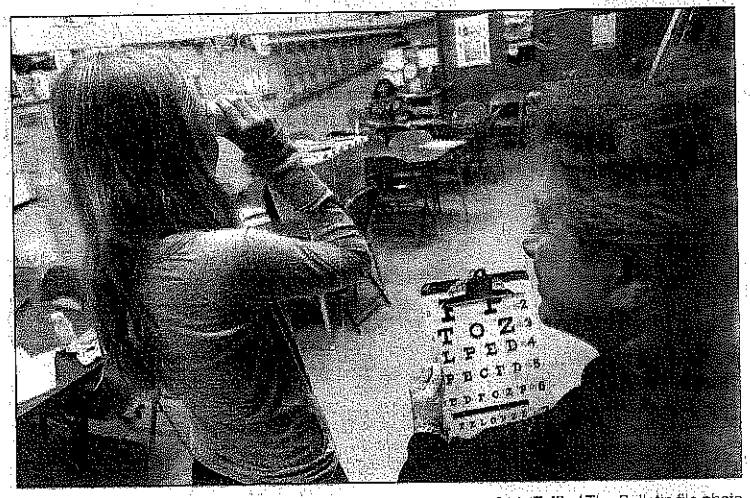
Out of date

Wayne Schumacher, executive director of the Oregon Optometric Physicians Association, says the survey is further evidence that the nonspecific vision screening requirement is ineffective.

"We had a sneaking suspicion, but that was a definite confirmation that it's broken," he says. "We're essentially operating under a 1950s regulation that's never been adjusted and it's quite vague."

In fact, the distance acuity test in use in most schools dates back even further. The Snellen eye chart test and the 20/20 standard were developed in the Civil War era to ensure that soldiers could see the enemy before they were in range of their rifles.

Classroom learning, however, requires much more than merely being able to see far, says Julie Bibler, executive director of the



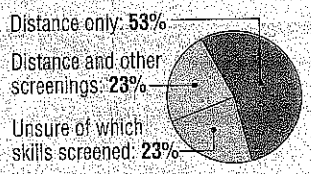
Andy Tullis / The Bulletin file photo

Ciara Isaak, then a fourth-grader at R.E. Jewell Elementary School in Bend, undergoes a distance acuity test with Children's Vision Foundation volunteer Mickey Lumetta in April. A study suggests many other districts aren't doing a good job of vision screening.

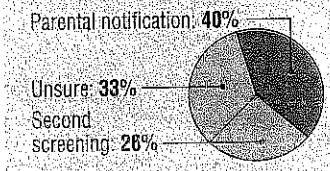
Vision screening in Oregon schools

A recent survey of Oregon school districts found most do not provide comprehensive vision screening for primary grade students. Only a quarter of school districts surveyed tested for more than distance vision. Percentages may not add up to 100 due to rounding.

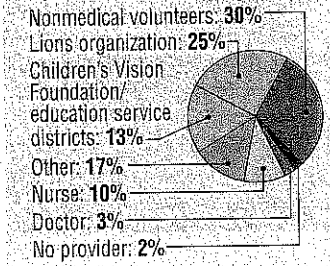
Type of screening



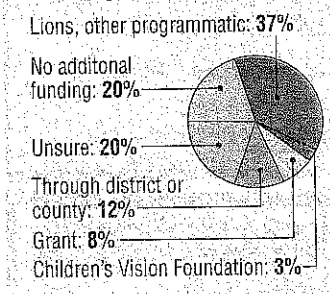
Follow-up process



Who provides screening



Funding



Source: The Oregon Health Forum

Children's Vision Foundation in Bend. Distance acuity, she says, accounts for only about a quarter of the visual skills needed for learning.

Being able to go from near to far accounts for another quarter, and about half of learning is done at close proximity, the distance from the eye to a book on a desk. Students might be able to see the blackboard just fine, but not be able to follow a line of type in a book without losing their place.

"If we're just looking at the distance with the Snellen chart, we're only checking 25 percent of their needs," Bibler says. "We're relying on this 150-year-old model. We have to go beyond."

Bend-La Pine Schools may have the Cadillac of all screening programs, thanks to Bibler's foundation. The nonprofit group organizes and trains volunteers to conduct vision screenings with second- and fourth-graders, and students in other grade levels when teachers or nurses suspect a problem. Entering its eighth year, the program has screened more than 15,000 Bend-La Pine students, finding more than 2,800 potential vision problems, a referral rate of 18.6 percent.

The screenings come at no cost to the school district or the state. The foundation operates on a shoestring budget, relying on fundraising and grants. This year, Bibler is working with the Lions Sight and Hearing Foundation to bring the screenings to the La Grande and Burns-Hines school districts.

Bibler once worked as an educational assistant and was surprised to find kids struggling to learn because of uncorrected vision problems. She decided to investigate why children weren't being screened and eventually launched the foundation.

Bend-La Pine Superintendent Ron Wilkinson has been a strong supporter of the foundation's screening program since a strategic planning committee opted to implement it districtwide for the 2001-02 school year.

"I think that when it was first presented to me, it was an idea that made sense to me just intuitively. If kids can't see, they're going to have difficulty reading," he says. "Now with literally seven years of data behind this, we know. It's past the intuitive stage."

Wilkinson says he believes the program could easily be exported to other school districts if the state provided funding and a handful of individuals could be found to coordinate the screening program. The remaining hurdle, he believes, will be to educate decision-makers on the importance of screening for more than just distance acuity.

"Eight years ago, I would say I was certainly in the camp (of thinking that) if you talk vision problems, they would catch those with that one test," he says. "I'd been involved in education at that point almost 30 years, and I was unaware of that. I think that's a problem that's still widespread."

"If we're just looking at (distance vision), we're only checking 25 percent of their needs. We're relying on (a) 150-year-old model. We have to go beyond."

— Julie Bibler, Children's Vision Foundation in Bend

Redmond schools screen elementary students for distance acuity every year using parent volunteers under the direction of school nurses. Amber Turnage, the lead school nurse for the district, says they used to conduct more comprehensive checks that looked for things like tracking issues.

"We've received a lot of flak from doing that," she says. "Not the whole eye physician industry agrees with that."

Turnage says eye doctors expressed concern that such screening would result in the overreferral of students and would swamp doctors' offices. Bibler discounts that notion.

"We haven't heard of a false referral yet," she says.

Calls to Sisters, Culver, Crook and Jefferson school districts regarding their vision screening programs were not returned.

Legislative action

Rep. Gene Whisnant, R-Sunriver, is now heading a work group on children's vision that will attempt to provide state legislators with a viable solution for improving screening of Oregon students.

"We were all shocked that they're not getting this visual screening, because if you can't see, you can't read," Whisnant said.

The task force will meet again in September, and Whisnant says he hopes the members can come to an agreement on some proposal to take to the House Education Committee and ultimately to the full Legislature.

The challenge, however, may be in getting everybody to agree on what type of screening to support. Some would like statewide screening of children well before they enter schools, catching the type of vision problems that can impair early learning. By the time kids hit school age, these people say, they may be too far behind in development to catch up. But critics say it would be difficult for the state to track kids before they enter the school system.

Others have suggested requiring all children to have a comprehensive eye exam before they enter school, similar to current immunization mandates. Some ophthalmologists are concerned, however, that such a requirement could flood their offices with patients but catch only a small number of problems.

Whisnant says he is leaning toward a pilot program to see if the Children's Vision Foundation approach could be re-created in other districts at the same low cost. Many believe the program has been tested enough and worry that a pilot program would push statewide screening back another two years.

"There's a couple of different agendas on the table," says Gabby Marshall, a pediatric optometrist in Bend. "I would love to see a bill that both optometry and ophthalmology support and there is no opposition to, if everybody agreed this is the best thing for the children."

Schumacher says the optometrist group is now finalizing its position on vision screening but supports a program such as one implemented in Kentucky, which requires a comprehensive eye exam by an eye doctor prior to entering the school system, then periodic school screening for more than just distance acuity.

Ophthalmologists, however, counter that the prevalence of serious eye disease is too low to warrant widespread comprehensive eye exams.

"That's going to be on the order of 5 to 10 percent," says Dr. David Wheeler, a pediatric ophthalmologist with the Casey Eye Institute. "So you're screening 90 percent of kids who are mostly going to be normal or (at) the most just needed glasses. That's extremely wasteful."

While funding will be an issue in a tight economy, Marshall says the state could probably implement an effective screening program for a relatively paltry $500,000 a year.

The task force will also have to consider how to follow up to ensure that children who fail vision screenings get a full evaluation and treatment. While many parents may have insurance to cover vision correction, legislators suspect it's lower-income families who aren't having their children's eyes checked and are unable to afford glasses or other corrective measures.

Rep. Tina Kotek, D-Portland and vice chairwoman of the House Health Committee, has also been participating in the vision task force and believes the Legislature will consider some sort of vision screening measure in 2009.

"I do believe we have to do something on this topic," she says. "The requirement is that each school does something, but we know that's not happening, unless you have a group like in Central Oregon. That's an amazing program. It would be nice to be able to replicate that in different parts of the state."

Not addressing vision issues in schools could have long-term ramifications. Studies consistently show that high-school dropouts, juvenile offenders and the adult prison population have much higher rates of unaddressed vision problems. Many believe that vision difficulties early in life can limit success in school and cascade into more serious lifelong problems. Bibler says state legislators have confirmed to her that Oregon currently uses the number of third-grade nonreaders to forecast for prison beds down the road.

"That's unacceptable. It's unacceptable that there's a vision piece here that's never been looked at," she says. "If we have all this money going into this system to take care of these people that have not been successful, it would be so much more cost-effective. We know that it's not just this piece, but this is a pretty easy thing to take care of."

Markian Hawryluk *can be reached at 541-617-7814 or mhawryluk@bendbulletin.com.*

Daughter's school woes are caused by disorder of sight

DEAR ABBY

Dear Abby: Please help me get the word out about a common condition that severely affects children's ability to succeed in school because it inhibits reading, spelling and concentration.

My daughter, who was obviously bright, tested at first-grade reading level in fifth grade. She had undergone all the school testing for learning disabilities, plus two days of testing at a respected university hospital. None of these tests or specialists revealed what could be wrong with her.

My child's self-esteem suffered. Her confidence faltered; she began acting out in school. At home she was a great kid, until it came time for schoolwork. Then the battles began. She thought she was dumb. When studying, she could read for only a very short time. She often begged me to read things to her. When working on spelling and assigned to rewrite the words she missed five times, she often recopied them wrong. We thought she just wasn't trying.

After much research on the Internet, I came across a disorder called "convergence insufficiency disorder." This visual condition is the leading cause of eyestrain. Fortunately, we had the opportunity to have her tested at the Mayo Clinic, where her condition was confirmed, and she was successfully treated with vision therapy.

It was as though a miracle had occurred. After six months of treatment, my daughter is almost at her age-appropriate reading level. Her comprehension and retention have markedly increased, and her self-esteem and attitude about reading are much better.

Children with this condition will not benefit from tutoring, special education or extra help from teachers until the condition is diagnosed and treated. My child had 20/20 vision and still had this disorder. It's not routinely checked with eye exams, and schools don't test for it.

I suspect that many children out there are undiagnosed or misdiagnosed and going untreated. The treatment for convergence insufficiency disorder is noninvasive, effective, and much of it can be done at home. Please help me get the word out so other families won't have to go through what we experienced.

— **Angie W. in Minnesota**

Dear Angie: I am pleased to help you get the word out to other families whose children are struggling to learn. After reading your letter, I contacted my experts at the Mayo Clinic in Rochester, Minn., and was informed that this problem, where the eyes drift too much inward (or outward) in attempting to focus, can also be present in adults.

The symptoms can include eyestrain, headaches, blurred vision, sleepiness and trouble retaining information when reading. Other symptoms associated with convergence insufficiency include a "pulling" sensation around the eyes, the rubbing or closing of one eye when reading, words seeming to "jump" or "float" across the page, needing to reread the same line of words, frequent loss of place, general inability to concentrate and short attention span.

The good news is: Vision exercises can fix the problem in most cases. Prism glasses are another option; however, they are more often prescribed for adults.

Dear Abby is written by **Abigail Van Buren,** *also known as Jeanne Phillips, and was founded by her mother, Pauline Phillips. Write Dear Abby at www.DearAbby.com or P.O. Box 69440, Los Angeles, CA 90069.*

Eye doctors recommend young people participating in sports have an eye exam if there are any indications of vision problems. Nearsightedness, farsightedness or astigmatism can lead to a variety of physical injuries during sports, including eye injuries.

What are the warning signs?

Parents and coaches should watch for the following warning signs on the field or in the gym, which may indicate poor depth-perception or other vision problems:

- Always swinging the bat too early or too late
- Missing often while trying to catch the ball
- Squinting to see the ball or other players

What if we can't afford regular eye exams?

Assistance is available through the Oregon Foundation for Vision Awareness, a non-profit organization that helps disadvantaged children receive essential eye care. The OFVA can be reached at (800) 922-2045 or www.ofva.org

OOPA | 4404 SE King Road | (503) 654-5036
www.oregonoptometric.org

Eye on the Ball

Tennis Soccer Basketball
Hockey Raquetball
Lacrosse Football Baseball

Anytime is a Good Time for Young People to Protect Eyes from Sports Injuries

"Baseball is such a great sport. Unfortunately, the fun of the game can be spoiled for young people if they sustain an eye injury. I want to encourage kids, their coaches and parents to make sure our budding athletes protect their vision so they can continue playing for a long time."

- Pete Ward
Former Chicago White Sox player

The Problem

- Every year, sports and other recreational activities cause more than 40,000 eye injuries in the United States.
- Among young people ages five to 14 years of age, baseball is the sport most frequently associated with eye injuries.
- The cost of repairing an injured eye can easily exceed $10,000 in medical bills, not to mention the emotional costs to the family and child.
- Ninety percent of sports-related eye injuries are preventable.

The Injuries

- A fast-moving ball can injure the bones around the eye or even the eyeball itself.
- Other players' hands or gloves can scratch the eye, causing damage to the eye's surface.
- A misguided bat or racquet can cause head injuries leading to vision problems.

The Solution

Protective eyewear like sports goggles can be either prescription or non-prescription., Sports goggles should be made of non-breakable materials. Helmets or headgear can also play an important role in protecting eyesight and preventing head injuries.

What should be done if a child gets an eye injury while playing sports?

Young people should be seen by their eye doctor or primary care provider as soon as the injury occurs. If not properly treated, vision problems can persist and lead to lifelong difficulty playing sports, driving or maintaining certain jobs.

OREGON OPTOMETRIC PHYSICIANS ASSOCIATION

Children's Vision FOUNDATION

Editorial

Mandating Comprehensive Eye Examinations for Children: Where Is the Evidence?

David K. Wallace, MD, MPH - *Durham, North Carolina*

Recently, states such as Kentucky and Illinois have passed legislation requiring comprehensive eye examinations for all children before school entry. Many other states are currently debating the relative merits of comprehensive eye examinations versus screening for visual problems. There is no doubt that some form of childhood vision screening is important, since many conditions such as strabismus and amblyopia are best detected and treated early in life. However, there are many problems with requiring a comprehensive eye examination for every child, including the high costs of the examinations and unnecessary treatments such as vision therapy and glasses for insignificant refractive errors. In the midst of the debate, a plethora of misinformation and misunderstanding has surfaced. This editorial examines the medical facts and myths behind arguments for and against pediatric comprehensive eye examinations.

One argument in favor of comprehensive eye examinations before school entry has been that vision screening is inadequate. Reports such as the Vision in Preschoolers (VIP) study[1] are sometimes cited to demonstrate that the sensitivity of vision screening devices is less than ideal. This argument is flawed because screening for vision problems in childhood is not a one-time process. The VIP study investigated the accuracy of various screening devices during one encounter only.[1] These results are not directly applicable to the process of repeated vision screening throughout childhood, which occurs in the primary care physician's office, in schools and day cares, and at health fairs. A typical child has multiple vision screening encounters throughout childhood. The combined sensitivity of these screening encounters is much higher than that of a single screening test, particularly if different types of screening tests are done.[2] In addition, any child with an eye condition missed by screening is likely to have a very mild problem. The VIP study showed nearly 90% sensitivity with 90% specificity of Retinomax autorefraction (Nikon, Inc., Melville, NY) and SureSight screening (Welch Allyn, Inc., Skaneateles Falls, NY) for the most important visual problems.[1]

Those who consider vision screening to be inadequate often point to the problem of poor follow-up after abnormal vision screening. This argument is unsound because a one-time encounter with an eye doctor does not equate to long-term compliance with office visits and treatment that is necessary for an optimal outcome. Just as some patients do not act on referral to an eye doctor, many have poor follow-up and/or inadequate treatment compliance after one or more visits. A one-time mandated eye examination does not solve the problem of lack of follow-up after abnormal vision screening. Additional research is needed to identify and address barriers to follow-up after failed screening examinations.[3]

A second argument often made by those wanting to mandate comprehensive pediatric eye examinations is that they are less expensive than the medical and social consequences of missed eye pathology and poor vision over the long term. However, evidence is lacking that performing a complete eye examination on every child before school entry would significantly reduce the economic impact of visual disorders in the United States. In addition, the cost of mandated comprehensive eye examinations to parents, insurers with vision care plans, and taxpayers is huge. In the state of North Carolina, for example, over 100 000 children enter public school kindergarten each year. At an estimated cost of $100 per examination, the price tag for examinations alone is over $10 million. Most of this money would come out of the pockets of parents who would be forced to obtain normal eye examinations for their children who have already passed vision screening as part of physical exams at their pediatricians' offices. This $10 million estimate for North Carolina does not include the cost of glasses, which are often prescribed by optometrists when ophthalmologists consider them to be unnecessary. One recent study from Tennessee found that, after examining children without amblyogenic risk factors, ophthalmologists and optometrists prescribed glasses in 6% (29/477) and 35% (145/413) of cases, respectively.[4] The total cost is further increased when considering parents' time away from work and travel expenses for office visits.

A third argument in favor of mandated pediatric eye examinations is that undetected eye problems cause learning difficulties, so comprehensive eye examinations are necessary in order to have children "visually ready to learn." However, the most common undetected vision problems in children at the time of school entry are mild nearsightedness and amblyopia, and these problems do not cause learning disabilities. A child with mild nearsightedness will have normal near visual acuity for reading. Distance visual acuity will be variably reduced, usually prompting complaints from the student or teacher and referral to an eye doctor. Amblyopia almost always affects one eye only. The other eye has normal vision, and the center vision in the weaker eye is suppressed (subconsciously ignored) when reading or doing other school activities. Therefore, amblyopia causes no visual symptoms that interfere with learning, and an affected child generally has normal vision when both eyes are open.

There are those who support comprehensive eye examinations because they consider them necessary in order to detect other problems than can affect learning such as uncorrected farsightedness and "visual processing problems." However, glasses are usually unnecessary for low amounts of hyperopia, because children have a tremendous capacity to accommodate (14 diopters for an average 8 year old[5]). One study showed that there is no significant reduction in children's visual acuity until uncorrected hypermetropia is 4.5 diopters or more.[6] Accommodative insufficiency in children is very unusual, and if present, it prompts

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investigation for systemic disorders such as botulism or central nervous system abnormalities.[7] Children with uncorrected high hyperopia are usually referred to an eye doctor after complaining of blurry vision and/or headaches, developing noticeable strabismus, or failing a photoscreening or vision screening examination. Unnecessary treatments such as spectacles for low amounts of hyperopia can even be harmful in some cases because of expense to families and psychosocial consequences of wearing glasses. With regard to "visual processing problems," there is no compelling evidence that therapy directed at the eyes helps with learning difficulties. Vision therapy is a controversial and usually expensive treatment that most ophthalmologists consider to be unproven and unnecessary.[8,9]

Another argument made in favor of comprehensive eye examinations is that amblyopia must be detected early in order to be treated effectively. Although this is true, the optimal time to detect and treat amblyopia is well before the age of entering school. One study showed that anisometropic amblyopia in very young children (younger than age 3) occurred less commonly and was less severe than in older children.[10] Therefore, screening at the earliest possible age and initiating treatment during preschool years is a more appropriate strategy to reduce the prevalence of severe amblyopia later in childhood.

Finally, some proponents of comprehensive eye examinations argue that they should be viewed in the same way as physical examinations or immunizations before school entry. However, a major difference is that infectious diseases targeted by immunization programs are a public health threat, whereas visual problems such as amblyopia and myopia are not contagious and pose no such threat. Prekindergarten physicals are more similar to screening examinations than to comprehensive subspecialty examinations. Primary care doctors screen for a variety of problems affecting multiple systems of the body such as the skin, heart, lungs, brain, visual, and auditory systems, and they usually refer to subspecialists when problems are detected. If a comprehensive eye examination by a subspecialist is necessary to detect visual problems, then the same line of reasoning would hold that complete examinations should be done by neurologists and by ear, nose, and throat specialists before school entry. Because of the low yield of such subspecialty examinations, the high cost could never be justified.

In summary, evidence is lacking to mandate comprehensive eye examinations for all children before school entry. A comprehensive eye examination done before entering school is poorly timed, has a low yield, and would likely result in glasses prescribed unnecessarily for many children. As a result, vision screening should remain the standard to identify the small proportion of children who need to have comprehensive eye examinations. Federal and state governments should devote resources toward developing effective vision screening programs that will identify those children who need evaluation by a subspecialist.

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Vision for Learning

80%
approximately 80 percent of a student's learning is done visually

20%
anywhere from 15 to 25 percent of children have vision problems, and many of these are undetected

70%
at least 70 percent of the nation's juvenile delinquent population has vision problems

The Correlation is Clear . . . Vision is integral to a child's success.

Common Behaviors

associated with vision problems:

- Loses place and skips line
- Confuses letters, numbers, or words
- Tilts head or closes one eye while reading
- Becomes easily distracted
- Shows aggressive behaviors and is frustrated with school

Please visit our website for a full list and for more information about vision problems.

www.childrensvisionfoundation.org

Donate/Volunteer

Please support our children by joining us in our vision for learning. We need your help in making vision screening available to all kids.

☐ Yes, I would like to donate to Children's Vision Foundation

Donation: $10 $25 $50 Other: _____

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

☐ Yes, I'd like to volunteer. Please contact me.

IMPORTANT! Phone: _____

E-mail: _____

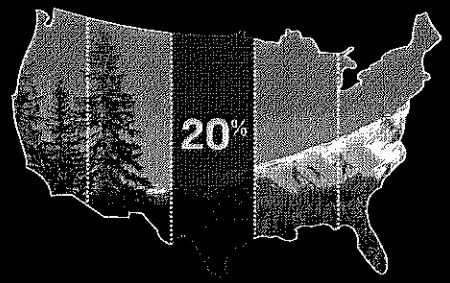
Children's Vision
FOUNDATION

61451 Rock Bluff Lane | Bend, OR 97702

541-330-3907

www.childrensvisionfoundation.org

childrensvision@bendbroadband.com



Nationwide 1 out of 5 children has a vision problem.

The child doesn't realize it.

A parent doesn't realize it.

A teacher may suspect it.

There are literally thousands of students waiting to be identified.

Children's Vision
FOUNDATION

Who we are

Children's Vision Foundation is a nonprofit organization that helps identify children with vision problems. CVF screens 3,000 - 5,000 students a year using a modified version of the New York State Optometric Association screening battery. CVF reaches out to Oregon communities to identify, educate, and facilitate.

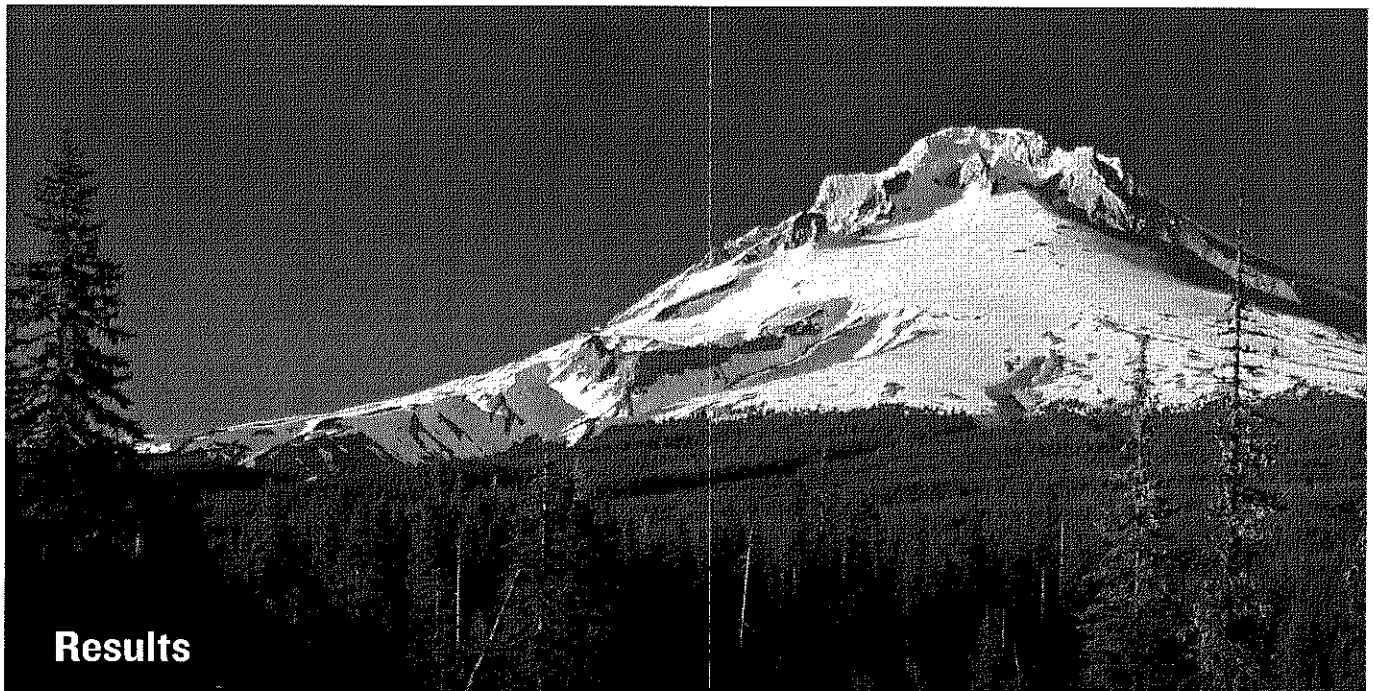
What we do

Conduct vision screenings that assess many facets of every child's visual abilities.

Provide families and school staff with information that encourages a professional eye exam for those kids we've identified with a potential vision problem.

Organize and train community volunteers to conduct screenings.

Educate communities about vision problems that may affect learning.



Results

Gloria was a quiet girl in fourth grade with long, straight hair. Tending to keep to herself, often hiding behind her curtain of hair, Gloria seemed nervous about the vision screening. The morning was sunny and the nearby mountains were sparkling with snow. I mentioned them to Gloria whose blank look in response revealed that she had never seen the mountains. Later, when presented with the distance vision acuity test, Gloria was unable to read any of the top letters on the eye chart the largest at almost 2 inches high. But when a special lens was placed in front of her eyes, Gloria stepped back and exclaimed, "Oh! I can see letters!"

After receiving financial help for a professional eye exam and glasses, Gloria was soon walking around school sporting new purple frames. She was no longer hiding behind her hair and was walking taller. I was thrilled when, on an equally beautiful day, Gloria came up to greet me with a big smile and said, "The mountains really are beautiful!"

Her transformation into an active, social student was most gratifying to watch.

— Julie Bibler, CVF director

Screening far beyond the standard Snellen eye chart test

Along with the Snellen eye chart test, CVF utilizes a seven-point screening process that assesses far and near visual acuity, farsightedness, depth perception, near point of convergence, fusion, and visual tracking—all integral elements of success in school and in life.

Children's Vision
FOUNDATION

CVF/ Oregon Youth Challenge Program

Vision Screening Program partnership

In November of 2002, Julie Bibler, the screening coordinator for the National Children's Vision Foundation (NCVF) met with Mr. Vince Hartney, the logistics and operations supervisor for the Oregon Youth Challenge Program (OYCP). They decided to screen a specific group of OYCP students who could potentially have vision challenges using a version of the New York State Optometric Association (NYSOA) screening battery.

The OYCP is an alternative high school for at risk, often homeless, high school dropouts from around the state. These 16-18 year old students participate in a 24/7 structured environment for a period of six months. 100-150 students earn high school credits and are involved in community service, physical training and team activities. Two classes of students participate each year. The Bend-LaPine School District had previously approved vision screenings using the same battery as one of their strategies within their strategic planning goals for the district.

In 2002, the NCVF performed an on site screening on **19 students selected by the Youth Challenge staff because of concerns about their vision. Of those 19 students screened, 15 failed the screening and were referred out for a professional examination**. Since the students were due to graduate from their six-month program in a few weeks, a follow-up on those students was not possible.

Since then, we have screened the entire class of incoming students soon after they enter the program. With each student's vision screening results available earlier, the OYCP staff can contact the student's family and have a professional exam done before their program is completed. Having their vision screening results near the beginning of the course has proved helpful and is now a standard procedure. The results are as follows:

Class Screened	Total Students	Referred Students	% Referred
2-Nov	19	15	79%
3-Feb	95	26	27%
4-Feb	115	35	30%
5-Feb	113	15	13%
6-Feb	120	29	24%*
7-Feb	139	22	16%
8-Feb	143	23	16%
9-Feb	141	25	17%
10-Jan	137	30	21%
11-Jan	146	21	15%
12-Jan	141	17	12%
13-Feb	144	16	11%

(* 2/06 class not rescreened.)

Class Screened	Total Students	Referred Students	% Referred
3-Jul	132	44	33%
4-Jul	138	34	25%
5-Sep	122	22	18%
6-Aug	135	13	10%
7-Aug	144	17	12%
8-Aug	130	20	15%
9-Aug	145	16	12%
10-Jul	138	21	15%
11-Jul	142	25	17%
12-Jul	146	14	10%
	2,825	521	19%

In 2003, Mr. Hartney mentioned that they had changed their participant application form to include more information on the vision part of their health area. He also made a comment that the **"... vision screening program has been the most successful partnership for supporting student success."** By identifying students having vision challenges and communicating with their families, this partnership has directly benefited at risk students.

In the fall of 2004, a demonstration project was initiated to explore the possibilities of expanding the treatment options beyond basic lens care to include vision therapy for binocular and perceptual dysfunctions. A team of professionals and volunteers from around the state performed comprehensive exams on referred students at a vision clinic. In the spring of 2006, a second demonstration model followed with a second group of students, using information from the previous project and a modified approach. This project was of particular interest due to the prevalence of learning related vision problems in the school 'dropout' population. A paper was published nationally in Optometry and Vision Development in November 2008.

Since 2006, the Youth Challenge program has become more stringent with new participants, asking them to have a professional vision exam within the last six months before entering the program. Their latest class results reflect the positive impact this change has made. In the fall of 2006, our partnership expanded by having Youth Challenge students doing community service by volunteering with the elementary student school screenings. Both OYCP and elementary students benefitted from these screenings for several years.

The Oregon Youth Challenge is consistently honored as one of the top programs out of over 30 nationally. Research shows that at least 70% of the nation's juvenile delinquent population can have vision problems. Many of the Youth Challenge students have come close to being included in that population.

Based on the results from previous classes, OYCP now requires that incoming students have a professional exam in the last six months. The Children's Vision Foundation's ten year partnership with the Oregon Youth Challenge Program has proven to be beneficial to many students. 2,825 students have been screened to date with 521 students being referred for professional care.

(February 2013)

R.E. Jewell Elementary Referrals (January 2008)

Referral key

A- Acuity (f) far (n) near (r-l-b) right-left-both
C- Convergence
F- Fusion
T- Tracking
?- not rescreened
S- satisfactory (referrals only)
#- Last year referral

Grade Teacher

2nd Bauer (22 students)

Student name here	A (f-r 20/50)
" " "	A (f-b 20/100, n-r 20/80) F, T
" " "	A (f-r 20/50) F, T

2nd Detweiler (21 students)

Student name here	F
" " "	T
" " "	T?

4th Williams (30 students)

Student name here	A (f-l 20/70)
" " "	A (f-r 20/100, f-l 20/70, n-r 20/80, n-l 20/60) F, T#
" " "	A (n-r 20/40, n-l 20/60) F T
" " "	T#
" " "	A (f-l 20/50) F#

Totals

2nd graders screened-	119	4th graders screened-	114	233 students
Identified-	33	Identified-	17	50 Identified

Second and fourth grade referrals

Acuity= 21	Acuity= 16
Convergence= 4	Convergence= 0
Fusion= 9	Fusion= 5
Tracking= 19	Tracking= 6

Student Referrals

1st graders

Student name here	A (f-b 20/40) T?

3rd graders

Student name here	T
" " "	A (f-b 20/70) T#
" " "	S#
" " "	A (f-r 20/70, n-r 20/60, n-l 20/40) F, T#
" " "	A (f-r 20/100, n-r 20/80) F#
" " "	F, T#
" " "	absent, didn't screen this year# (17 3rd graders)

5th graders

Student name here	T#
" " "	A (f-l 20/40) (16 5th graders)

Total referral students screened= 38 Total referral students referred= 26

Est. 1883

BEND LAPINE Schools

EDUCATING THRIVING CITIZENS

SUPERINTENDENT'S OFFICE

520 N.W. Wall Street
Bend, Oregon 97701-2699
(541) 383-6000
FAX: (541) 383-6003

Date _____

To the Parents or Guardians of _____.

Your child recently participated in a Classroom Vision Performance Screening. Visual skills such as tracking, fusion and near vision, that have been identified as critical skills necessary for efficient reading and general classroom performance, were screened. Lack of these skills may lead to frustration in the learning environment and sometimes to disinterest in school. Early identification and treatment of these problems has been shown to increase the academic success of students in the school setting.

Results from your child's screening indicate that he / she may have difficulty with:

____ Visual Acuity – This relates to the need for glasses to see clearly to compensate for near sightedness, far-sightedness or astigmatism.

____ Convergence – This relates to double vision when looking up close.

____ Fusion – This relates to "eye teaming," the ability of the two eyes to work together in acquiring visual information.

____ Tracking – This relates to how the eyes move across the written pages and take in information efficiently and correctly.

The Classroom Vision Performance Screening indicates that a near vision performance and / or visual acuity problem may be present. This screening was conducted by trained Children's Vision Foundation (CVF) volunteers who are not eye care professionals. It does not take the place of a comprehensive eye exam. No prescription for eyeglasses can be given based on this information collected and the volunteer screeners are not responsible for "false referrals." If your child is already under care of an eye doctor, you may wish to bring these results to their attention.

Based upon the results, it is recommended that your child have a professional examination that would evaluate eye health and refractive (visual acuity) needs and make a detailed analysis of the visual performance skills. Please bring this letter with you to your doctor's office at the time of your child's examination and ask for the above skills to be tested thoroughly.

Please contact your school's FAN coordinator or CVF (330-3907) with questions or for further information and assistance. Bend-La Pine Schools are not responsible for examination or treatment fees.

Children's Vision

FOUNDATION

Dear Parent or Guardian:

The Children's Vision Foundation (CVF) and volunteers under the direction of the CVF will be conducting vision screenings on all second and fourth graders in the Bend-LaPine school district as well as individual student referrals. This screening was added to the school district strategic plan in 2001 as an important tool to help increase student's overall classroom performance.

Vision Performance Screenings

This is our twelfth year of vision screenings in the Bend-LaPine School District. I would like to take this opportunity to explain the program in more detail. These screenings will be ongoing from September to April. It checks for near and distance acuity, near point of convergence, fusion, depth, and tracking. Each of these skills can have a significant effect on a child's ability to learn and stay interested in school.

Please review the vision screening report to see how your child performed in each of the skills they were tested for. When one or more of these skills have been determined by the CVF to be unsatisfactory as revealed by the screening process, we recommend that the student visits an eye care professional as soon as possible. (As with any screening it is possible for a child to perform poorly on any area for a variety of reasons. Although we have developed a method to verify the results, it is important that you understand that "false positives" can occur.)

All eye examinations are designed to test vision and eye health. Some are also designed to test for the skills identified in our screening. When making your appointment, ask whether tests for each visual skill that has been indicated on the vision screening report will be evaluated. If you have any questions or concerns, please call me at (541) 330-3907.

Remember, simply achieving a 20/20 score (visual acuity) does not mean that your child's eyesight is suitable for the challenges of student learning.

Sincerely,

Julie Bibler

Julie Bibler
CVF Screening Coordinator

Children's Vision
FOUNDATION

Rescreen _____

VISION SCREENING REPORT

School: _____ **Date:** _____

Child's Name: _____ **Age:** _____ **Grade:** _____

Teacher: _____ Gender: M / F Glasses: Y / N

1. Far Visual Acuity:
Right Eye 20/_____ 1 / 2
Left Eye 20/_____ 1 / 2
("2" if 20/40 or worse in either eye or 2 line difference between eyes)

2. Hyperopia:
Right Eye 20/_____ 1 / 2
Left Eye 20/_____ 1 / 2
("2" if can read the line they could read in test #1 with 1.50 lens)

3. Near Visual Acuity:
Right Eye 20/_____ 1 / 2
Left Eye 20/_____ 1 / 2
("2" if 20/40 or worse or 2 line difference between eyes)

4. Depth Perception: _____/9 1 / 2
("2" if 6 or less)

5. Near Point of Convergence: 1 / 2
("2" if break greater than 4 inches)

6. Fusion at near: 1 / 2
("2" if 2 or 4 balls)
Fusion at distance: 1 / 2
("2" if 2 or 4 balls)
Vertical Imbalance: 1 / 2
("2" if line not through circle)

7. Eye Tracking:

King Devick:	Time	Errors
Test I		
Test II		
Test III		

TOTAL _____/_____ 1 / 2
("2" if when norm + one SD is exceeded

Results:

[ ] Unsatisfactory performance was noted on one or more of the above visual tasks.

[ ] Satisfactory performance was noted on all skills screened.

Please Note: This is a vision screening performed by Children's Vision Foundation volunteers, and does not take the place of a comprehensive eye examination. It should detect obvious vision problems. It does not detect eye health problems and the person administering it is not responsible for failure to detect eye health problems. A comprehensive dilated eye exam is recommended if there is any indication of decreased performance on any of the skills screened below. Prescriptions for eyeglasses or contact lenses can only be given from a comprehensive exam.

Children's Vision Foundation
61451 Rock Bluff Lane, Bend, Oregon 97702 541-330-3907 voice/fax

Dear teacher,

The Children's Vision Foundation is providing the individual results, so that you are informed. If you need further information, please call (541) 330-3907.

Acuity – This relates to the need for glasses to see clearly to compensate for near-sightedness, far-sightedness or astigmatism.

Near point of convergence – This relates to double vision when looking up close.

Fusion – This relates to "eye teaming", the ability of the two eyes to work together in acquiring visual information.

Tracking – This relates to how the eyes to move across the written page and take in information efficiently and correctly.

The following student(s) were identified in your class and received a vision referral packet.

Student's name	Acuity "forgot glasses"
" "	Acuity, near point of convergence, fusion, tracking
" "	Fusion, tracking

Children's Vision
FOUNDATION

Dear Teachers,

The Children's Vision Foundation's (CVF) goals include

- Conducting effective school screenings that includes a comprehensive assessment of children's visual abilities.
- Providing families and school staff with information that will facilitate appropriate vision referrals.
- Educating communities regarding learning related vision problems.

CVF and volunteers have been screening students since the 2001-2002 school year in counties throughout Oregon. We have shared statistics, stories, and information with Oregon state leaders for years, supporting the need for vision screening students at least once during elementary school.

As teachers whose students have been involved in this process, your insights would provide important information regarding how these screenings have affected your students in the past , your ability to teach them, and what CVF can do to improve. We would really appreciate it if you would take a minute, fill out this survey and provide us with your thoughts.

Has the vision screening information been helpful to your students' education and classroom performance in the past? Yes_____ No _____ Not sure_____

Have you received enough Information on children's vision? Yes _____ No _____

Is there anything else that would be helpful?

_____

_____

Comments/ suggestions you'd like to share (this can be yours and/or something a child said):

_____

_____

_____

_____

Name (optional): _____ Phone # (optional):_____

School : _____ Date: _____

Thanks for all that you do on behalf of children!

Please return this form to your office manager and I will collect it from her. If you'd like to contact me, please call (541) 330-3907. Thank you!!

Julie Bibler

Children's Vision Foundation Director